42.

Authors are urged to use only the metric system of weights and measures and the centigrade thermometer of Celsius.

43.

The indication of enlargement or of reduction, which is necessary to the comprehension of an illustration, should be expressed in figures rather than by mentioning the system of lenses used.

44.

It is useful to indicate whether the enlargement is linear, or of the surface, or of the mass. This may be easily expressed as follows:— $\times 50^1$ indicates a linear enlargement of 50 times, $\times 50^2$ an enlargement of the surface, and $\times 50^3$ an enlargement of the mass.

BIBLIOGRAPHICAL NOTICE.

Rhopalocera Exotica; being Illustrations of New, Rare, and Unfigured Species of Butterflies. By H. Grose-Smith and W. F. Kirby. Vol. II. London: Gurney and Jackson, 1892–97.

The second volume of this well-known work should have received notice at our hands before now; but, as sometimes happens in the case of a serial publication still in course of issue, the fact of the

volume's completion was overlooked.

Unduly retarded, however, as our notice has been, the authors may rest assured that there is no lack of appreciation on our part of the manner in which the high standard of their work has been maintained. As they mention in their preface, nearly 250 species are figured in this volume, the figures occupying sixty quarto plates, and representing not only both upper and under sides, but in a large number of eases both sexes of each species. The colouring throughout is excellent, but the drawing of a few of the smaller figures is somewhat unequal in quality. It will be admitted, however, that the best executed figures in point of drawing are those representing Oriental Lycanida (of the extremely beautiful genera Thysonotis, Waigenn, &c.), which for accuracy as well as for artistic merit are admirable; they are the work of Mr. Horace Knight.

Butterflies of all families except the Hesperiidæ find illustration in this volume: but in the number of species described and figured the Lycanidæ (109) far exceed the other groups. Next come the Pierinæ with 43 species, and in this subfamily we would call attention to the three plates devoted to the remarkable and most interesting genus Dismorphia, exhibiting very strikingly the extraordinary differences (mostly traceable to mimetism in various directions) presented by no fewer than 16 species. Of the Satyrinæ 33 species are given, belouging chiefly to the genera Mycalesis and Pedaliodes. Some very fine Nymphalinæ are figured, notably several rare species of Mynes, of which M. Websteri from New Guinea presents an underside of quite isolated character, while that of M. cottonis from New Britain is curiously imitative of the underside shown by a section of the Pierine genus Delias. The Morphinæ are represented by as many as nine species of the singular genus Tenaris, mostly natives of New Guinea.

We notice the announcement of a change as regards the issue of future parts of this valuable work, viz. that, instead of the regular quarterly publication of a part containing three plates, the parts will be published at such intervals as may be found convenient, the number of plates varying, and the price of each part being regulated accordingly. We may add, however, that, notwithstanding this announcement, there has been but little alteration either in the dates of issue or in the number of plates in each part as yet published in the third volume, which is being continued by Mr. Grose-Smith without the cooperation of Mr. Kirby.

R. T.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

April 20th, 1898.—W. Whitaker, B.A., F.R.S., President, in the Chair.

The following communication was read:-

'Petalocrinus.' By F. A. Bather, Esq., M.A., F.G.S.

Certain curious fan-like objects, obviously echinodermal, have for a long time been preserved in the Riks-Museum at Stockholm, but their significance was first definitely ascertained when similar fossils were found in Iowa, and brought to England by Mrs. Davidson. The latter were described by Mr. Stuart Weller in a paper entitled 'Petalocrinus mirabilis (n. sp.), and a New American Fauna; 'and the former, with fresh material obtained by Mr. Weller from various American localities, are the subject of the present communication.

The Silurian crinoid genus *Petalocrinus*, Weller, is discussed, on the evidence of all the original material from Iowa and of the further material above mentioned. The replacement of the original